

## 9884 MONROE DR. DALLAS, TX 75220 RADIO INTERCOM SYSTEM OPERATING INSTRUCTIONS

#### IMPORTANT SAFETY INSTRUCTIONS

Please read all instructions prior to use. Retain these instructions for future reference. Heed all warning labels. Do not attempt to service this product yourself. Refer to qualified personnel.

#### LIMITED WARRANTY

Audio Tech warrants to our authorized Distributor-Dealer that products of our manufacture are free from defects in materials and workmanship for one (1) year from date of installation to the home owner-user. For a period of one (1) year the Distributor-Dealer that sold a defective product will accept it for service and or replacement at the option of Audio Tech at no charge to the home owner-user, providing the product has not been misused, in commercial service, and was correctly installed based on written instructions furnished by us with the product.

#### **EXTENDED WARRANTY**

After the one (1) year, for another two (2) years Audio Tech soley warrants to the User that it will repair or replace at their option any prepaid defective product received at their offices in Dallas, Texas.

On receipt of a defective Master Radio-Intercom Unit and an advance payment of \$35.00 to cover the cost of handling, packaging, and return transportation Audio Tech will REPAIR or REPLACE at their option the defective unit with a factory re-manufactured unit and return-ship the original or replacement unit within three (3) working days.

On receipt of a defective Speaker and an advance payment of \$20.00 Audio Tech will REPLACE any defective speaker with a brand new speaker of the same kind, and ship it within three (3) working days.

There are no other express or implied warranties. Audio Tech is not liable for consequential or incidental damages related to the use or performance of any defective product. The laws of some states are different and your rights can be different depending on where you live.

# OPERATING INSTRUCTIONS RADIO INTERCOM SYSTEM MODEL 462, 462X and 462Z

The new Model 462 combination AM-FM Radio, and Intercom System with built-in Door Chimes is a sophisticated state of the art home entertainment and communications system that is easy to operate by everyone in the family. The 462X has built-in station tuning, and the 462Z also has a home automation relay that can be used to release a door lock. To enjoy the many features of the system you must read these instructions. Keep this booklet in a handy place for reference to help you perform the less frequently used functions.

#### SOME HELPFUL SUGGESTIONS

- 1. This radio and intercom is a System that consists of Room/Patio speakers plus door entry speakers that activate the Westminster Chime. For best performance and quality of audio you must properly adjust two (2) separate volume controls that regulate the volume of any room speaker.
- A. The main volume control is on the Master Unit and is labeled Intercom. This control regulates the maximum loudness of volume that will be received at all the room speakers. This volume control should always be adjusted to a level slightly louder than your comfort level. Be sure to make this adjustment with the SPEAKER volume control fully clockwise (full on); after the intercom adjustment is made, the SPEAKER control can be rotated back slightly to reduce the volume to a comfortable level.
- B. Every room station has a secondary volume control. This volume control should be used slightly below Full-On to reduce the volume level at the speaker for individual comfort. Remember, set the Master Unit slightly louder than normal, and adjust the individual Room speaker a little from Full-On to the lower comfort level.

Do not turn the INTERCOM control on the Master Unit to an unnecessarily high (loud) setting. This can cause the amplifier to go into distortion. Do not try to correct distortion by just lowering the volume at the room station; instead, lower the intercom volume control on the master.

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# SPEAKER ON-OFF VOLUME CONTROLS

The ideal position for all speaker controls (Master-Room-Patio) is the fully clockwise position. The speakers are fully on at this setting. A setting lower than the 3 o'clock position will result in low level intercom communication even if the intercom volume control at the Master Unit is fully on. To turn a speaker off turn the volume control fully counterclockwise. At the "Off" setting the Room Speaker cannot be monitored and will not be included in the Room Listening Function. This guarantees privacy at each Room Speaker.

#### STATION TUNING-RADIO ON-OFF

For the 462 system, Room and Patio speakers with the optional "ST" (Station Tuning) feature will have a Push to Tune label on the Volume Control. To turn the radio on, press the volume control knob and hold for approximately two (2) seconds. To turn the radio off, press the volume control knob and hold for approximately two (2) seconds. When the radio is on press the control knob and immediately release to advance the tuner through the radio stations 1-6 in memory previously selected. See RADIO STATION MEMORY (1-6). The 462X and 462Z have the station tuning feature integrated with the control buttons. To change stations, press the Room Talk and Room Listen buttons simultaneously; at the master, use the memory buttons directly.

#### INTERCOM VOLUME CONTROL

This volume control should be adjusted with the Room Speaker at high settings as described above. Communication and monitoring are most effective when the Room Speaker volume control is fully on.

#### **TONE CONTROL**

This control adjusts the bass-treble tone of any selected program. Turn the control counterclockwise for more bass, and clockwise for more treble.

#### RADIO VOLUME CONTROL

This is the main volume control for audio program. It should be adjusted to a slightly higher than comfort level with the Room Speaker at or near fully on to your personal comfort.

#### CHIME VOLUME

The Door Chime volume is adjusted at the factory assuming a near fully on loudness of the Room Speaker volume control. If a different chime volume is desired, there is a labeled internal volume control on the back of the Master Unit. Remove the Master Unit from the wall for adjustment with a small screw driver.

#### **HOME AUTOMATION RELAY (462Z)**

**RELAY:** A relay (e.g. for door release) can be activated by pressing both LISTEN and DOOR buttons simultaneously at any station.

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#### **ROOM SELECTOR SWITCHES 1-12 PLUS MASTER UNIT**

Each switch controls a Room Speaker. Each switch has three (3) positions, INT-ONLY, MON, and RAD-INT.

- 1. When the INT-ONLY (Intercom Only) position is selected and the numbered room speaker is on the speaker will receive all intercom communications and the door chimes. The speaker will not receive a monitored room, or the sensitivity of a monitor Room Speaker varies with the number of speakers in the monitor position that are microphones active at the same time. The system works best with two (2) room speakers in the monitor mode at the same time, and the speaker volume control fully on.
- 2. When the MON (Monitor) position is selected the numbered room speaker is on and the room speaker will transmit to all speakers that are in the RAD-INT position and are also on. The room speaker will not receive communications or chimes unless the monitor override switch (described below) is in the on position.
- 3. When the RAD-INT (Radio-Intercom) position and the numbered room speaker is on the room speaker will receive everything. The room speaker must be in the RAD-INT position to receive a monitored room. The RAD-INT position is the position most often used to program the Room Speakers.

#### MONITOR 'OVERRIDE'

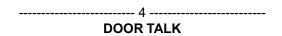
When the Monitor Override switch on the Master Unit is off, a monitored room will not receive intercom communication or door chimes. If the Monitor Override switch is on, a monitored room will receive intercom communication and door chimes.

#### **ROOM TALK and ROOM LISTEN**

When Room Talk is pressed and held in at the Master Unit or any Room Speaker, you can talk to all other rooms that are not turned off at the Room Speaker volume control. The radio will mute when you press the Room Talk button. You can not talk to a Room Speaker in the monitor position unless the Monitor Override switch is on.

When the Room Listen button is pressed and held in at the Master Unit or a Room Speaker, you can listen to all other rooms that are not turned off at the Room Speaker volume control. The radio will mute while the Room Listen button is held in.

The sensitivity of room listen (intercom loudness) varies with the number of Room Speakers on throughout the system at the same time. Notice the increase in intercom loudness when you turn seldom used speakers off such as guest rooms. Leaving unused speakers off will improve the performance of the intercom to all other Room Speakers.



When the Door Talk button is pressed and held in at the Master Unit or any Room Speaker you can converse with a person at a door station. When you release the Door Talk button the person at the door can speaker hands free for 15 seconds. The radio program if on will mute, and return automatically after the final 15 second door listen delay. All Room Speakers that are not turned off at the volume control will hear the door communication. A Room Speaker in the monitor position will not hear the door communication unless the Monitor Override switch at the Master Unit is on.

#### "HANDS FREE" ANSWERING A CALL

To utilize the hands free feature when communicating with other Room Speakers or the patio, the person initiating the call must operate both the Talk and Listen switches. Press Room Talk to initiate a call. Release Room Talk, and press and hold the Room Listen button while you receive a reply.

#### **POWER OFF**

Press the Power Off button to turn off the AM, FM, CD, or AUX functions.

#### **DISPLAY TIME-FREQ**

Press to switch the digital display from the time display and frequency display. The display will always return to time after ten seconds of no station activity. This button functions only when AM or FM radio program is selected.

#### **AM RADIO PROGRAM**

Press to activate the AM broadcast band as the source of radio program. The LED red light indicator above the button will light when AM radio is on. When AM is selected the display will switch to frequency automatically and return to time after ten seconds if no program is selected.

#### **FM RADIO PROGRAM**

Press to activate the FM broadcast as a source of radio program. The LED red light indicator above the button will light when FM radio is "ON". When FM is selected the display will switch to frequency automatically and return to time after ten seconds if no program is selected.

# COMPACT DISC (CD) PROGRAM

Press to activate the CD Player as the source of program. The LED red light indicator above the button will light when the CD Player is on. Please refer to "BUILT-IN CD PLAYER" section on page 7 for more information.

#### **AUXILIARY (AUX) INPUT**

Press to activate the Aux input as the source of program. The LED Red light indicator above the button will light when the Aux button is "ON".

#### MANUAL SCAN DOWN

If the AM or FM button is on and the frequency is displayed, each press of the Scan button will lower the frequency one position down on the AM or FM frequency band. AM or FM must be on, and the frequency must be displayed to make a station change. The display will return to time in ten seconds if no station is selected.

#### MANUAL SCAN UP

If the AM or FM button is on and the frequency is displayed, each press of the Scan button will advance the frequency one position up on the AM or FM frequency band. AM or FM must be on, and the frequency must be displayed to make a station change. The display will return to time in ten seconds if no station is selected.

#### SEEK TUNING DOWN and UP

When you press the Seek Up button it will automatically seek (advance the tuner) to the next strong AM or FM radio station on the band. The frequency is automatically displayed during this function. When you stop on a station the display will automatically return to time after ten (10) seconds. You must be on the AM or FM program for this function to operate.

When you press the Seek Down button the same function takes place except the movement is down on the AM or FM Radio Band.

#### **RADIO STATION MEMORY (1-6)**

When any one of the buttons numbered 1-6 is pressed, the AM or FM station stored in memory, corresponding to that button will be activated. Each number stores one AM or FM radio station. When the numbered button is pressed the frequency in memory will automatically appear in the display. The display will return to time ten (10) seconds after a radio station has been selected. To store a station in memory, use the Mem/Time Set button. See next page.

## MEMORY and TIME SETTINGS (MEM/TIME SET)

To store a radio station (AM or FM) in memory buttons 1-6 you first select the desired AM or FM Station, and the frequency will show on the display. A good technique is to enter your favorite AM or FM station on button one, your next favorite station on button number two, etc. Stations in memory can be alternated or mixed in any AM or FM sequence.

After you select your favorite AM or FM station press button number one, and you have stored that station. Select another AM or FM Station and press button number two and you have stored another station, etc. The Mem/Time Set button is also used to set the clock.

#### SETTING THE CLOCK (HRS ADV) and (MIN ADV)

To set the clock the display must show the time. Press the Mem/Time Set button and hold it in. While holding, each time you press the Hrs Adv button you advance the hour setting of the clock by one hour. If you hold the Hrs Adv button in, the hour setting will rapidly advance through the 24 hour settings. Be sure to observe the PM indicator when setting the correct hourly time.

When time is displayed and the Mem/Time Set button is pressed and held, each press of the Min Adv button will advance the minute setting of the clock by one minute. If you hold the Min Adv button in, the minute setting will rapidly advance through the 60 minute settings.

#### RADIO AUTOMATICALLY TURNS ON (ON TIME)

When the On Time button is pressed and immediately released, the display will switch to the Auto On Time and the red LED indicator above the button will light. The On Time can now be set using the Hrs Adv and Min Adv buttons. The display will return to the normal time, and the red LED above the button will go out after ten seconds of no activity. The "On" Time is used with advance through the 60 minute settings.

#### RADIO AUTOMATICALLY TURNS OFF (OFF TIME)

When the Off Time button is pressed and immediately released, the display will switch to the Auto Off Time and the red LED indicator above the button will light. The Off Time can now be set using the Hrs Adv and Min Adv buttons. The display will return to normal time, and the red LED above the Button will go out after ten seconds of no activity. The "Off" Time is used with the auto function. See next page.

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When the Auto button is pressed and immediately released the red LED above the button will light and the automatic function will become active and remain indefinitely active 24 hours a day until the Auto button is pressed to cancel the automatic on and off function. When the auto function is active the radio (AM or FM) will automatically turn on at the "On" Time setting and in sequence at the "Off" Time setting. The AM or FM Station that will turn on and off is determined by whichever broadcast band was selected last. The auto function will not turn anything on or off but the AM and FM Radio.

#### **BUILT-IN CD PLAYER**

For masters with built-in CD player, the CD source button selects the CD player in the Master as the music source. The CD player has been optimized for use in a home music-intercom system. It features auto-load, auto-eject, double-play repeat, edge loading, and simplified operation. Only four buttons are needed to operate the player. With Double-Play Repeat, the CD will play twice through and then stop. This allows for 2 hours of continuous play.

To play a CD - Press the CD source button to turn on the CD light. Once the CD light is on, the player will be ready for automatic loading or will begin playing if a CD is already in the player. Insert the edge of the CD into the vertical slot on the right side of the Master. The CD should be inserted at the same angle as the slope of the right side of the slot, with the label of the CD facing out. Be ready to release the CD as soon as the player grips to pull it inside.

While the CD is playing, press the CD button to cause the player to pause (PAU—will be displayed) until the CD button is pressed again to resume play. Push the SEEK DOWN and SEEK UP buttons, located directly below the CD/II button, to change tracks forward and backward. Track number will appear momentarily on the display (example:" t02" for track 2). Press the DISPLAY TIME/DATA button at any time to display the track number.

To stop play completely (so that the CD will start playing at t01 when the CD button is pressed again), press OFF or any other SOURCE button (AM, FM, AUX). To use MEMORY buttons, press FM or AM first. Remote station tuning will work while the CD player is on, and will stop play of the CD. Stopping play also resets the CD player mechanism. You can hear the player reset.

Press EJECT button to remove the CD. The EJECT button is located to the left of the CD slot. The EJECT light will come on and the CD will automatically be ejected at an angle that facilitates gripping the CD. The display will momentarily show "Ejt". If the CD is not removed within three seconds, it will be automatically reloaded in order to protect the CD, but play will not resume. Pressing the Eject button also resets the CD microprocessor.

### OPTIONAL EQUIPMENT and ACCESSORIES

#### **PATIO SPEAKERS**

An outside PATIO Speaker is a popular and frequently added additional speaker to the radio intercom system. The Patio Speaker operates the same as the indoor Room Speaker. Since the Patio Speaker can be distracting to neighbors after dark the speaker should be used with consideration, and when not in use the volume control on the speaker should be turned to the fully "OFF" position to keep voice communications inside the house confidential.

#### THE TAPE PLAYER and COMPACT DISC CHANGER

This radio-intercom system features INPUT JACKS accessible from the back (inside) of the Master Unit for permanent connection to a Tape Player, Compact Disc Changer, or another type of accessory utilizing the auxiliary input jack.

AUDIO does not offer these accessories that are available to you from many discount stores at extremely competitive prices. You make the choice of the BRAND and the FUNCTIONS best suited to your application, and you can do this at a substantial saving by making the purchase locally.

All Tape Players and Compact Disc Changers are designed for STEREO, but this radio-intercom system is not stereo, it is a compatible monaural system.

#### ACCESSORY WIRING KIT MODEL AK2

AUDIO sells a wiring kit for use with a Stereo Tape or CD Changer. The Model AK2 kit contains two (2), fifty (50) foot lengths of "shielded" cable and the terminal plate that utilizes a single gang electrical box to receive the output cables from the Tape Player or CD Changer. This kit allows you to permanently connect both the Tape Player and CD Changer to the inputs at the Master Unit

#### REMOTE CONTROLS and CEILING SPEAKERS

In a large family room or entertainment area where the ceilings are raised or vaulted, CEILING SPEAKERS are often installed to provide more loudness and better distribution of radio or special music program. Most often two (2) ceiling speakers are installed that operate from the same REMOTE CONTROL at a wall location. The Remote Control has the same functions as a regular Room Speaker and operates the same as a Room Speaker.

#### **CAUTION**

RISK OF ELECTRIC SHOCK DO NOT OPEN



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